

NOV 03 2003

PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/604525	
	Filing Date	7/28/2003	
	First Named Inventor	Rodnunsky	
	Art Unit		
	Examiner Name		
Total Number of Pages in This Submission	13	Attorney Docket Number	JR-P0002

ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input checked="" type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Post Card
Remarks <i>See enclosed Petition to Make Special</i>		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Joseph J. Mayo 53,288		
Signature	<i>Joseph J. Mayo</i>		
Date	10/31/03		

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Joseph J. Mayo 53,288		
Signature	<i>Joseph J. Mayo</i>	Date	10/31/2003

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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NOV 03 2003

PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

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FEE TRANSMITTAL

for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$)

Complete if Known

Application Number

10/604525

Filing Date

7/28/2003

First Named Inventor

Rodninsky

Examiner Name

Art Unit

Attorney Docket No.

JR-P0002

METHOD OF PAYMENT (check all that apply)

☐ Check ☒ Credit card ☐ Money Order ☐ Other ☐ None☐ Deposit Account:Deposit
Account
Number
Deposit
Account
Name

502689

Delma Law Group

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent	-20** =	X	
Multiple Dependent	-3** =	X	

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	130
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$)

130⁰⁰

SUBMITTED BY

(Complete if applicable)

Name (Print/Type)

Joseph J. Mayo

Registration No.
(Attorney/Agent)

53288

Telephone

858-442-5877

Signature

[Signature]

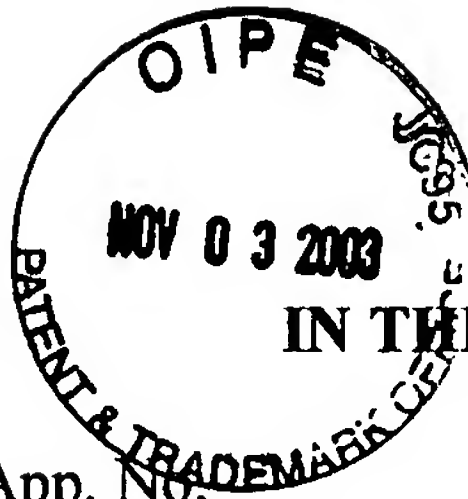
Date

10/31/03

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

App. No. : 10/604525 Confirmation No.: 1524
Applicant : Rodnunsky Docket No. : JR-P0002
Filed : 7/28/2003 Customer No. : 36067
TC/A.U. : UNKNOWN
Examiner : UNKNOWN

For: SYSTEM AND METHOD FOR MOVING OBJECTS WITHIN
THREE-DIMENSIONAL SPACE

PETITION TO MAKE SPECIAL UNDER 37 C.F.R. 1.102(d)

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicant hereby requests the above-identified application be Made Special in accordance with the Accelerated Examination procedure of MPEP 708.02 VIII.

Applicant submits that all claims in the pending application are directed to a single

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01 FC:1450 130.00 GP

invention.
Applicant has conducted a pre-examination search in class/subclasses 104/180, 348/144, 157, 212/76, 83, 248/58, 254/264, 352/243. A detailed discussion of the references found in the pre-examination search is included herein with patentability discussed to the particularity required by 37 CFR 1.111 (b) and (c).

Applicant submits the fee for Accelerated Examination as set forth in 37 CFR 1.17 (h).

Pre-examination Search

Applicant searched the following classes for relevant references: 104/180, 348/144, 157, 212/76, 83, 248/58, 254/264, 352/243. The relevant patents conducted during the search are identified below.

1. U.S. Patent No.s 4,710,819 and 4,625,938

U.S. Patent No. 4,710,819 (hereinafter the '819 patent), issued to Brown, discloses an apparatus configured to move an object in three-dimensional space using a set of at least three cables.

The '819 patent requires at least three cables that are attached to an object. The apparatus relies on controllable angular isolation in order to prevent pendulum motions in the object. For linear direction of an object, the apparatus requires independent movement of all cables in the system. This inter-dependence of cable movement regardless of object movement makes system control non-trivial. Movement of an object along the X-axis for example is not possible through the movement of one cable, but instead requires the movement of all supporting cables in unequal amounts since in general an object attached to at least three cables requires that the lengths of all cables to change when moving in a straight line in a given direction. This is the reason why

complex control software is required, the apparatus needs all ropes to move in a coordinated manner for even simple linear movements.

Applicant's Claimed Invention is Different

An embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the object and a Z movement device configured to move the X movement rope and the Y movement rope. The '819 Patent does not disclose a Z movement device as claimed.

2. U.S. Patent 5,440,476

United States Patent No. 5,440,476 (hereinafter the '476 patent) describes a system that positions a work point in three-dimensional space using at least three reeving systems. In addition, the control system requires all ropes move in a coordinated way to shorten and lengthen the amount of deployed cable in each cable used in the apparatus. For linear direction of an object, the apparatus requires movement of all cables in the system. The '476 patent also requires at least three reeving systems be connected to whatever object is to be moved.

Applicant's Claimed Invention is Different

An embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the object and a Z movement device configured to move the X movement rope and the Y movement rope. The '819 Patent does not disclose a Z movement device as claimed.

3. U.S. Patent 5,673,625

United States Patent No. 5,673,625 (hereinafter the '625 patent) describes a system for yarding logs that moves the logs within three-dimensional space. The system moves logs along the path set up by a single yarding cable. A method and apparatus for yarding logs by introducing slack is provided for use with a mono-cable system having a continuous loop of cable strung through a logging area along a path that the harvested timber is conveyed. The invention includes advancing the mono-cable system along the path of the mono-cable system until a length of cable not being used to secure a log is available. Slack is then created in the cable of the mono-cable system, after which the cable is transported to a log located on either side and distant from the path. The choker is then secured to the log, and the hook of the choker is secured to the cable. The slack of the cable is then eliminated, such that the secured log is retrieved from its felled position distant from the path to a position adjacent the path. The cable is then advanced such that the hook of the choker is caught on a stopper of the mono-cable system, and the log is moved along the path to a transport location from which the log is removed from the logging area.

Applicant's Claimed Invention is Different

An embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the object and a Z movement device configured to move the X movement rope and the Y movement rope. Applicant's invention uses a Z movement device and the '625 Patent does not.

4. U.S. Patent 5,562,040

United States Patent No. 5,562,040 (hereinafter the '040 Patent) describes a system for moving objects via an aerial ropeway that includes a haulage rope that travels along a path between two stations, and comprises two driving wheels. The system moves objects beneath a point under the line between the two stations.

Applicant's Claimed Invention is Different

In contrast to the '040 Patent an embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the object and a Z movement device configured to move the X movement rope and the Y movement rope. The '040 Patent does not use a Z movement device.

5. U.S. Patent 4,523,525

United States Patent No. 4,523,525 (hereinafter the '525 Patent) describes a system for boatless waterskiing that effectively moves objects beneath an endless cable whose path is defined by support structures.

Applicant's Claimed Invention is Different

An embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the object and a Z movement device configured to move the X movement rope and the Y movement rope. The '525 Patent does not disclose a Z movement device as claimed.

6. U.S. Patent 4,136,786

United States Patent No. 4,136,786 (hereinafter the '786 Patent) describes a system yarding logs. A rigging arrangement and yarder are disclosed for yarding in which a single cable is used and which serves as a skyline for supporting a carriage. The carriage moves between the yarder and upper anchor point along a line.

Applicant's Claimed Invention is Different

An embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the object and a Z movement device configured to move the X movement rope and the Y movement rope. The '786 Patent does not disclose a Z movement device as claimed.

7. U.S. Patent 6,566,834

In U.S. Patent 6,566,834, (hereinafter the '834 Patent) an invention is disclosed in which a payload can be moved and angularly positioned within three-dimensional space. The invention requires a computer control system in order to calculate the change in lengths of the support ropes in order to move the payload between two points. The invention appears to require power at the platform and locates the winches for the system on the platform, further reducing the payload capacity of the platform. The invention requires at least 6 cables in order to operate.

Applicant's Claimed Invention is Different

An embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the object and a Z movement device configured to move the X movement rope and the Y movement rope. The '834 Patent does not disclose a Z movement device as claimed.

8. U.S. Patent 5,585,707

In U.S. Patent 5,585,707, (hereinafter the '707 Patent) an invention is disclosed in which a robot or person can be readily moved within three-dimensional space. The payload is limited and the support structure is small scale. If the structure were to be scaled up, obstacles such as goal posts or light poles would inhibit the motion of the payload through a path between two points defined within the cube, since there are so many wires required to practice the invention. Also, the invention would not appear to allow the Z-axis to vary beneath the cube, and the size of the cube support structure to service a large volume of space would be extremely expensive to build on the scale required. The platform holds motors that limit the amount of payload that can be carried. Complex control must be used in order to keep the tensions in the cables coordinated from above and below the platform.

Applicant's Claimed Invention is Different

An embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the

object and a Z movement device configured to move the X movement rope and the Y movement rope. The '834 Patent does not disclose a Z movement device as claimed.

9. U.S. Patent 5,568,189

In U.S. Patent 5,568,189, (hereinafter the '189 Patent) an invention is disclosed for moving cameras in three-dimensional space. An aerial support platform is supported to extend below, and intermediate of, a pair of parallel cables mounted along respective opposite walls of a studio. A carriage rides on each of the parallel cables, and another pair of cables extends to connect the pair of carriages. A third carriage sits on the other pair of cables, and a series of further cables extend vertically from that carriage to the platform. The pair of carriages positioned on the opposite walls of the studio are controlled to move in tandem, and the third carriage has controlled movement between those carriages. The platform may be raised or lowered relative to the third carriage, and thus has three linear axes of motion.

Applicant's Claimed Invention is Different

An embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the object and a Z movement device configured to move the X movement rope and the Y movement rope. The '189 Patent does not disclose a Z movement device as claimed.

10. U.S. Patent 4,106,638

In U.S. Patent 4,106,638, (hereinafter the '638 Patent) an invention is disclosed for loading and unloading ships. The system moves objects along a line and then vertically moves the objects into and out of a ship. The system moves objects over a defined line beneath the support structure to a ship.

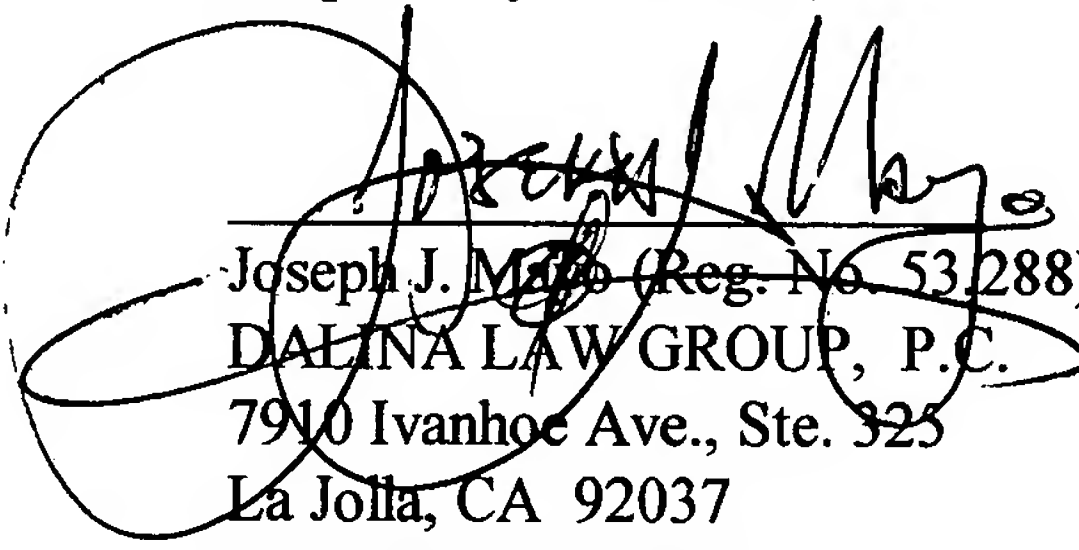
Applicant's Claimed Invention is Different

An embodiment of Applicant's invention moves an object in three-dimensional space via an X movement rope configured to move the object, a Y movement rope configured to move the object and a Z movement device configured to move the X movement rope and the Y movement rope. The '638 Patent does not disclose a Z movement device as claimed.

CONCLUSION

In view of the above the Applicant requests that the Petition to Make Special be granted and the examination of the application be advanced.

Respectfully Submitted,



Joseph J. Mayo (Reg. No. 53,288)
DALINA LAW GROUP, P.C.
7910 Ivanhoe Ave., Ste. 325
La Jolla, CA 92037
Tel. (866) 221-6964

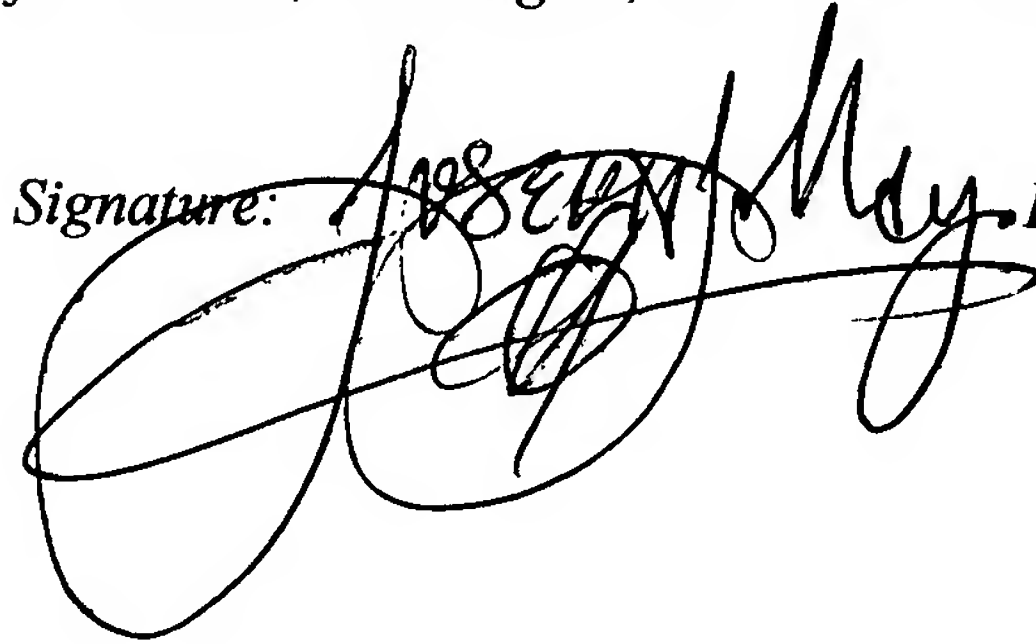
Correspondence Info:

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Signature:

A handwritten signature in black ink, appearing to read "Joseph E. H. May". The signature is written in a cursive, stylized font with large loops and a long horizontal stroke at the end.

Date: October 31st, 2003